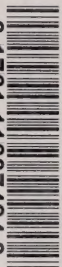


CA1
MSG
-1997
C34

Government
Publications

The City of Kamloops

3 1761 11637494 3



CAI
MS6
-1997
C34

FleetSmart PROFILES

THE CITY OF KAMLOOPS

Reducing Vehicle Emissions with Methanol Fuel

City officials in Kamloops, British Columbia, are conscientious guardians of the air quality in their community. To provide leadership in reducing vehicle emissions by using alternative fuels, the municipal government has assembled the largest concentration of methanol-fuelled vehicles in Canada.



About the city and its fleet

Kamloops is a city of 80 000 people located northeast of Vancouver. Although this region of British Columbia does not face the serious air quality problems of Vancouver or Victoria, municipal officials are nevertheless intent on reducing environmental pollutants.

In keeping with this philosophy, Peter Grauer, the city's Fleet and Facilities Manager, has spearheaded efforts to minimize the environmental impact of the 320-vehicle municipal fleet. Consisting of passenger cars, pickup trucks, heavy equipment and special-purpose machinery, the fleet supports a wide range of municipal operations – from engineering and road maintenance work to ice resurfacing and transportation of city officials and staff. Included in the fleet are several vehicles capable of operating on 85 per cent methanol fuel and 15 per cent gasoline, commonly known as M85.

service

A clean-burning fuel

Methanol is a liquid alcohol fuel that burns more completely than gasoline and, therefore, produces fewer emissions of carbon monoxide, hydrocarbons and oxides of nitrogen. In addition to being a transportation fuel, methanol is used in the automotive sector as a fuel additive and a gas line antifreeze and is the main ingredient in windshield washer fluid. It is also widely used in paints, adhesives and plastics.

Currently, all of Canada's methanol is manufactured from natural gas. However, methanol can also be made from coal and other hydrocarbons, as well as from woody biomass (methanol is sometimes called "wood alcohol"), sewage, and municipal and agricultural wastes. With continued technological improvements, the ability to produce methanol from renewable resources could give this fuel a long-term advantage over non-renewable, petroleum-based fuels.

In the past, several original equipment manufacturers (OEMs) have marketed flexible-fuel vehicles that operate on gasoline or any mixture of gasoline and M85 (in the 1997 model year, only the Ford Taurus will be available as an OEM, methanol, flexible-fuel vehicle). In addition to enhancing cold starting, the gasoline content gives M85 a visible yellow flame (pure methanol burns with an almost invisible flame in daylight), which is an important safety consideration in the event of fuel fire.

Leadership by example

Recognizing the environmental advantages of methanol, and wanting to lead by example, the City of Kamloops purchased its first two methanol, flexible-fuel vehicles in 1992. Since then, five additional methanol-fuelled cars have been added to the city's fleet.

A ready fuel supply

When the City of Kamloops was contemplating methanol as a vehicle fuel, one of the most important considerations was the availability of a reliable fuel supply. The Canadian Oxygenated Fuels Association (COFA) provided invaluable assistance in addressing this issue.

In conjunction with Methanex, a major methanol supplier, COFA established two methanol refuelling stations in Kamloops.

Although the municipality considered locating one of the stations at the fleet depot, the decision was made in favour of two public retail outlets.

"We wanted to encourage the public to use methanol, so establishing retail stations was the best option," explains Peter Grauer, Fleet and Facilities Manager for the city.

That decision paid off in 1994 when Kamloops became the first Canadian city in

which OEM methanol-fuelled vehicles were sold directly to the general public.

Previously, manufacturers had restricted the sale of these vehicles to certain fleet operators so that some control could be placed on their movement.

"We started with two cars to evaluate methanol as an automotive fuel," explains Mr. Grauer. "We were very happy with their performance, and City Council was very supportive, endorsing the purchase of additional vehicles."

The methanol-fuelled vehicles, which include Ford Taurus, Chevrolet Lumina, Plymouth Acclaim and Dodge Spirit, are used by city staff and councillors and for high-mileage trips. They are driven an average of 20 000 to 30 000 kilometres per year. The city policy is to assign vehicles to lower-mileage duties once they pass the 120 000-kilometre mark and to replace vehicles after 10 years of service.

Mr. Grauer reports a smooth transition to the methanol-fuelled vehicles. The city's drivers did not require special training or instruction, and cold weather starting has not been a problem. The performance of the flexible-fuel vehicles has been enhanced by the high octane level of methanol fuel. As well, by acquiring its methanol-fuelled vehicles directly from the manufacturer, the City of Kamloops has benefitted from a comprehensive service and warranty package.

Both the purchase price and the operating costs of methanol-fuelled vehicles are competitive with those of gasoline vehicles. On a fuel-equivalent basis, M85 costs about the same as regular gasoline, although the special oil required in the engines is almost twice as expensive. "Over the life of a vehicle, this is not a major impediment," notes Mr. Grauer.

payback

A satisfied customer with plans for the future

According to Mr. Grauer, the City of Kamloops is completely satisfied with its methanol-fuelled vehicles. "There has not been a single complaint about the use of methanol," he asserts. "It has surpassed our hopes in terms of reducing vehicle emissions."

Kamloops is committed to methanol for the long term and plans to replace its existing flexible-fuel vehicles with methanol vehicles as the need arises.

"The potential exists for methanol fuel to close an environmental loop," says Mr. Grauer. "If methanol were produced from products such as wood chips, it would become a renewable resource all the way around."



**For more information on
fleet energy-saving opportuni-
ties, please write to**

FleetSmart

Natural Resources Canada

580 Booth Street, 18th floor

Ottawa, Ontario

K1A 0E4

fax your request to

(613) 952-8169

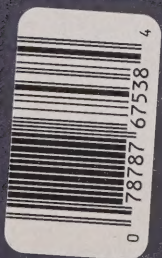
or e-mail

Fleet.Smart@es.nrcan.gc.ca

ISBN: 0-662-25410-4

Cat. no.: M91-24/16-1997E





Oxford.

ESSELTE



10%